

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. to 24. (Cancelled)

25. (New) A method to feed a chemical into a liquid flow using a feed device including a nozzle casing having an isolated mixing space, said method comprising:

feeding the chemical to the isolated mixing space in the feed device;

feeding a mixing liquid to the isolated mixing space;

mixing the chemical and the mixing liquid in the isolated mixing space to form a mixture of chemical and mixing liquid, and

feeding the mixture of chemical and mixing liquid to the liquid flow.

26. (New) A method according to claim 25, wherein the chemical is mixed with the mixing liquid less than 0.5 seconds before the mixture of chemical and mixing liquid is fed to the liquid flow.

27. (New) A method according to claim 25, further comprising feeding the chemical and the mixing liquid to the isolated mixing space in at least two separate flow paths wherein one flow path is disposed inside the other flow path.

28. (New) A method according to claim 25, wherein the mixture of chemical and mixing liquid is introduced into a feed liquid and then fed to the liquid flow.

29. (New) A method according to claim 28, wherein the process liquid is used as the feed liquid includes a liquid extracted from a process which includes the method to feed a chemical.

30. (New) A method according to claim 25, further comprising adjusting the mixing of the chemical with the mixing liquid by changing a position of the isolated mixing space in relation to a mixing liquid flow duct.

31. (New) A method according to claim 25, wherein the chemical includes at least one of TiO_2 , optical brighteners, paper dyes and silicates.

32. (New) A method according to claim 25, wherein the mixing liquid includes fresh water.

33. (New). A method according to claim 25, wherein the mixing liquid includes a circulation liquid extracted from a process which includes the method to feed a chemical.

34. (New). A method according to claim 33, wherein the process is a fiber suspension flow process.

35. (New) A feeding device for feeding chemical into a liquid flow comprising:
a nozzle casing,
a feeding liquid duct, and

a mixing apparatus in the nozzle casing and including a mixing space isolated from the feeding liquid duct, a chemical duct to pass the chemical to the mixing space, and a mixing liquid duct to pass a mixing liquid to the mixing space, the mixing space having an outlet of a mixture of chemical and mixing liquid feeding said solution to the feeding liquid duct.

36. (New) A feeding device according to claim 35, wherein the chemical duct further comprises a thin pipe chemical feed duct for feeding small chemical amounts to the mixing space.

37. (New) A feeding device according to claim 36, wherein the chemical duct includes a chemical feeding duct extending to the isolated mixing space centrally inside the feeding liquid duct.

38. (New) A feeding device according to claim 35, wherein the mixing liquid duct comprises a cylindrical mixing liquid feed duct for feeding mixing liquid to the mixing space.

39. (New) A feeding device according to any of the claims 35, wherein the isolated mixing space is provided at an end of the mixing liquid feed device facing the liquid flow duct.

40. (New) A feeding device to claim 35, further comprising a plurality of openings provided in a wall of the mixing liquid feed device in connection with the isolated mixing space for feeding the mixture of chemical and mixing liquid to the feed liquid flow.

41. (New) A feeding device according to any of the claims 35, wherein the liquid flow duct include at least a feed opening into which also the mixing liquid feed duct extends.

42. (New) A feeding device according to the claim 35, wherein the mixing liquid feed duct is at least partly located inside the nozzle casing feeding the feed liquid.

43. (New) A feeding device according to any of the claims 35, further comprising a securing device that secures the chemical feed duct to the mixing liquid feed duct.

44. (New) A feeding device according to the claim 35, further comprising a securing device that secures the mixing liquid feed duct to the nozzle casing so that a position of the mixing liquid feed duct can be adjusted.

45. (New) A feeding device according to claim 35, further comprising a mounting for securing the nozzle casing to the mixing liquid duct.

46. (New) A feeding device according to claim 35, further comprising a mount securing the mixing apparatus to the nozzle casing wherein the mount is adjustable.

47. (New) A feeding device according to claim 35, further comprising a conical converging portion in the nozzle casing defining a converging cross-sectional area of a flow path of the feed liquid to increase a flow velocity of the feed liquid.

48. (New) A feeding device according to claim 35, further comprising a conical converging portion in the mixing liquid duct including a cross-sectional area of a flow path of the mixing liquid to increase a flow velocity of the mixing liquid.

49. (New) A feeding device according to claim 35, further comprising valves in the chemical duct and connections to control the flow of the chemical.

50. (New) A feeding device according to claim 35, wherein a feed opening for the mixture of chemical and mixing liquid is located inside the liquid duct when the feed device has been secured to the flow duct.

51. (New) A feeding device according to claim 35, further comprising a feed opening for mixture of chemical and mixing liquid located in a feed liquid feed opening.

52. (New) A feeding device introducing a chemical into a fluid flow comprising:
a nozzle casing having a hollow section defining a flow path for a feed liquid and a feed opening at an outlet of the flow path;
a mixing liquid duct extending through the hollow section of the nozzle casing and having a mixing chamber including at least one aperture to discharge a mixture of chemical and mixing liquid into the feed opening, wherein the mixing chamber is isolated from the feed liquid flow path, and

a chemical feed duct extending through the mixing liquid duct and having a chemical discharge port at the mixing chamber, wherein the mixture of chemical and mixing liquid is formed in the mixing chamber of the mixing liquid and the chemical.

53. (New) The feeding duct of claim 52 wherein the nozzle casing including a converging casing section which forms a converging section of the flow path for the feed liquid.

54. (New) The feeding duct of claim 52 wherein the mixing liquid duct is coupled to the nozzle casing by an adjustable support which adjusts a position of the at least one aperture with respect to the feed opening.